

# Pfizer, Moderna vaccines less effective against South African COVID variant

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Two of the world's leading coronavirus vaccines don't work as well



against a more contagious South African variant, though both did manage to neutralize the virus, two new studies show.

But experts pointed out that what level of neutralization is needed to actually protect against the variant is still unclear and these latest studies on the Pfizer and Moderna vaccines were done in a lab setting, and not the real world, the *Washington Post* reported. Both reports were published Wednesday in the *New England Journal of Medicine*.

"These are in vitro studies and we don't know if there is a threshold for neutralization that defines protection. In fact, we don't even know that there is a quantitative correlation between antibodies levels and protection," *NEJM* Editor-in-Chief Eric Rubin said in a podcast on the findings. "It is very concerning that we don't know the clinical significance of these findings."

The two studies used genetically engineered versions of the South African variant against blood samples from vaccinated volunteers, the *Post* reported. The strain has been identified in many countries, including the United States, along with a variant first identified in Britain that scientists say is also highly contagious.

Moderna's research letter in the *NEJM* on its COVID-19 <u>vaccine</u> showed a sixfold drop in antibody levels against the South Africa strain, the newspaper said. The shot's efficacy against the variant has not yet been determined.

Pfizer, in testing its vaccine against the variant in a lab, found the shot generated about a third of the antibodies that are normally mobilized with the original strain. The activity, however, appeared to be enough to neutralize the virus.

Still, Pfizer said in a statement that it was "taking the necessary steps...



to develop and seek authorization" for an updated vaccine or booster shot that could better combat the variant.

In Johannesburg, South African scientists planned to meet Thursday to discuss the Pfizer study, a Health Ministry spokesman told *Reuters*.

"I do know that our scientists will be meeting to discuss [the study] and they will advise the minister," Popo Maja told the news service. "We are not going to be releasing a statement until advised by our scientists. We will also be guided by the regulator."

## Vaccines for all Americans by August: Biden

Every American who wants a coronavirus vaccine should be able to get one by the end of July, President Joe Biden said this week.

His message, delivered during a town hall meeting hosted by *CNN*, was more optimistic than one he delivered last week when he warned that logistical hurdles would most likely mean that many people would still not have been vaccinated by the end of the summer, *The New York Times* reported.

Meanwhile, Dr. Anthony Fauci, the nation's top infectious disease expert, on Tuesday revised his own optimistic estimate from last week, when he predicted the beginning of an "open season" for vaccines by April, the *Times* reported.

"That timeline will probably be prolonged, maybe into mid-to-late May and early June," he said in an interview with *CNN*.

At a time when Americans are keen for life to return to normal, Biden tried on Tuesday night to reassure the public.



While the president said he did not want to "overpromise," he said at one point that "by next Christmas I think we'll be in a very different circumstance, God willing, than we are today." At another point he predicted that by the time the next school year starts in September, the nation would be "significantly better off than we are today," the *Times* reported.

The White House also said Tuesday that states would begin receiving 13.5 million doses each week—a jump of more than 2 million doses.

The increases were welcomed by <u>state officials</u> desperate to inoculate more vulnerable Americans before more contagious variants of virus become dominant, the *Times* reported.

The Biden administration has been working with Pfizer to get the company more manufacturing supplies through the Defense Production Act, the *Times* reported. The administration announced last week that Pfizer and Moderna, the other maker of a coronavirus vaccine authorized in the United States, would be able to deliver a total of 400 million doses by the end of May, well ahead of schedule.

The latest boost in supply came partly because Pfizer will now get credit for six doses instead of five per vial, a White House spokesman said, while two-thirds of the boost came from increased output. Officials also now say there is an ample supply of the specialized syringes needed to extract the extra Pfizer dose.

White House Press Secretary Jen Psaki told reporters on Tuesday that with the latest increase, vaccine deliveries had jumped 57 percent since Biden was inaugurated, the *Times* reported.

#### New evidence that British COVID variant could be



### more deadly

More evidence has emerged that suggests a coronavirus variant already known to spread faster is also likely to be more deadly.

The B.1.1.7 variant, which is thought to have originated in Britain, is already firmly entrenched in America and could soon become the dominant strain, according to Dr. Rochelle Walensky, director of the U.S. Centers for Disease Control and Prevention.

Speaking on CBS' "Face the Nation" earlier this week, she said "we know now that, or we estimate now that about 4% of disease in this country is related to B.1.1.7," she said. "And we have projections that it may be the dominant strain by the end of March."

As of Thursday, there were 1,277 cases of the British variant found in 42 U.S. states, according to the CDC.

Walensky's warning came on the heels of research released by British scientists that shows B.1.1.7 might be more likely to trigger more lethal cases of COVID-19.

"The overall picture is one of something like a 40 to 60 percent increase in hospitalization risk, and risk of death," Neil Ferguson, an epidemiologist and scientific adviser to the British government, told the *Times*.

Vaccines already being distributed in the United States are believed to be effective against B.1.1.7, so Walensky said it's imperative that the massive rollout already underway continues. At the same time, and in the face of other new variants, other steps are underway, she told *CBS*.

Pharmaceutical companies are tweaking their research to fight the



B.1.1.7 variant, she said, and the CDC is monitoring how people who've already gotten the Pfizer or Moderna vaccines are faring.

"But we're not waiting for that," she said. "We're doing the science to scale up different vaccines in case we either need bivalent vaccines, that is a vaccine that has two different strains, or booster vaccines. Both are happening."

As of Thursday, more than 56.3 million Americans had been vaccinated, with 72.4 million doses distributed. More than 15.5 million people have gotten their second shot, according to the CDC.

## A global scourge

By Thursday, the U.S. coronavirus case count passed 27.8 million while the death toll was over 490,000, according to a *Times* tally. On Thursday, the top five states for coronavirus infections were: California with over 3.5 million cases; Texas with nearly 2.6 million cases; Florida with over 1.8 million cases; New York with more than 1.5 million cases; and Illinois with over 1.1 million cases.

Curbing the spread of the coronavirus in the rest of the world remains challenging.

In India, the <u>coronavirus</u> case count was more than 10.9 million by Thursday, a Johns Hopkins University tally showed. Brazil had nearly 10 million cases and more than 242,000 deaths as of Thursday, the Hopkins tally showed.

Worldwide, the number of reported infections neared 109.9 million on Thursday, with more than 2.4 million deaths recorded, according to the Hopkins tally.



**More information:** The U.S. Centers for Disease Control and Prevention has more on the <u>new coronavirus</u>.

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